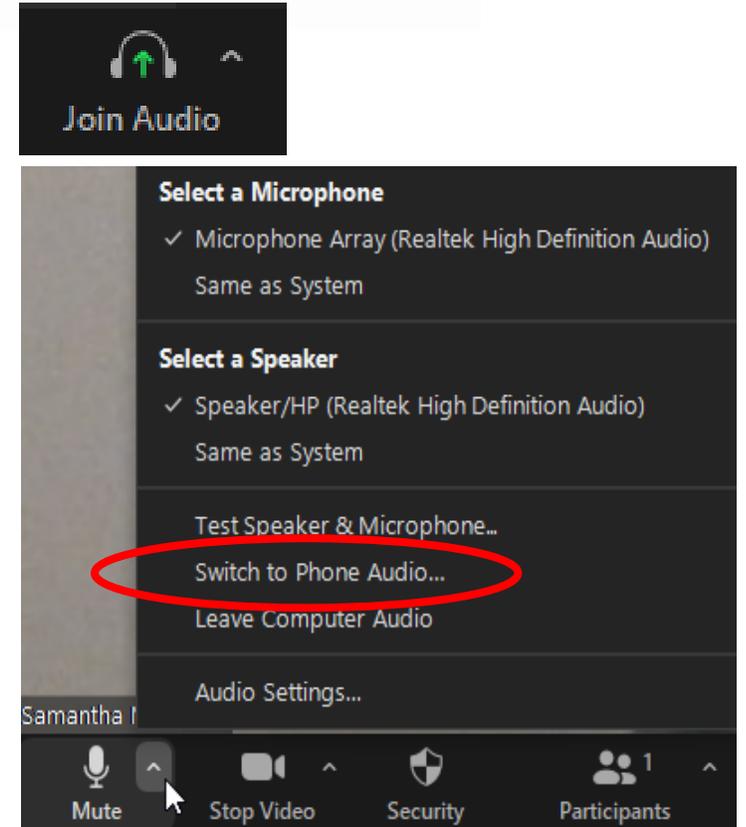


# **Columbia Basin Collaborative Integration/Recommendations Group**

**April 19, 2023  
1-5 pm PT/2-6 pm MT**

# Zoom Webinar Features

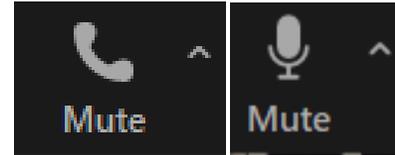
- If you have not **connected your audio**, click on the “Join Audio” at the bottom left of your screen.
- To **switch to phone**, click the arrow next to the microphone icon and select “Switch to Phone Audio”.
- If you have joined by browser, please click “Audio Settings”



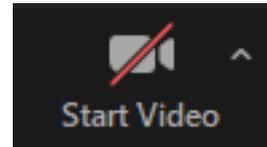
*For technical support, please contact Samantha Meysohn, 360-536-3660*

# Zoom Webinar Features – I/RG Members

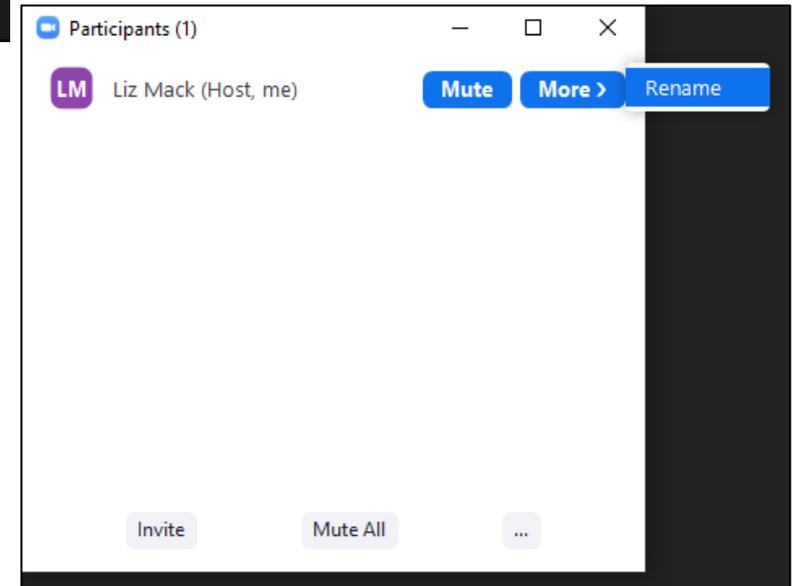
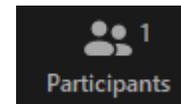
Keep yourself on mute when not speaking.



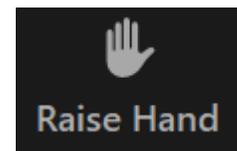
Use video, if possible, to promote face to face communication.



If needed rename yourself in the participant panel.



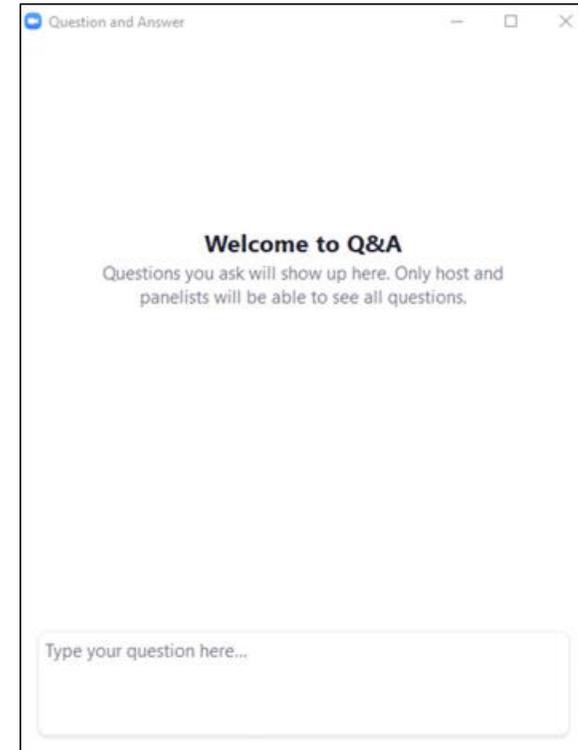
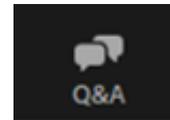
Find your raise hand function at the bottom of your screen



# Zoom Webinar Features – Audience Members

Audience members will remain muted.

If you have technology issues, please use the Q&A feature to reach our team



*For technical support, please contact Samantha Meysohn, 360-536-3660*

# In-Person Participation Reminders

**Please** limit side conversations and background noises

Turn your table tent when you would like to speak

The microphones are live!

# **Welcome, Opening Remarks, and Agenda**

# Agenda Review

Time (PT)	Topic
1:00 – 1:15 pm	Welcome, Opening Remarks, and Agenda
1:15 – 2:00 pm	Updates From Around the Region
2:00 – 2:30 pm	Consensus Process and Recommendation Overview
2:30 – 2:40 pm	Break
2:40 – 4:50 pm	Review Recommendations – Blocked Areas
4:50 – 5:00 pm	Next Steps and Summary
5:00 pm	<i>Adjourn</i>

# Meeting Guidelines

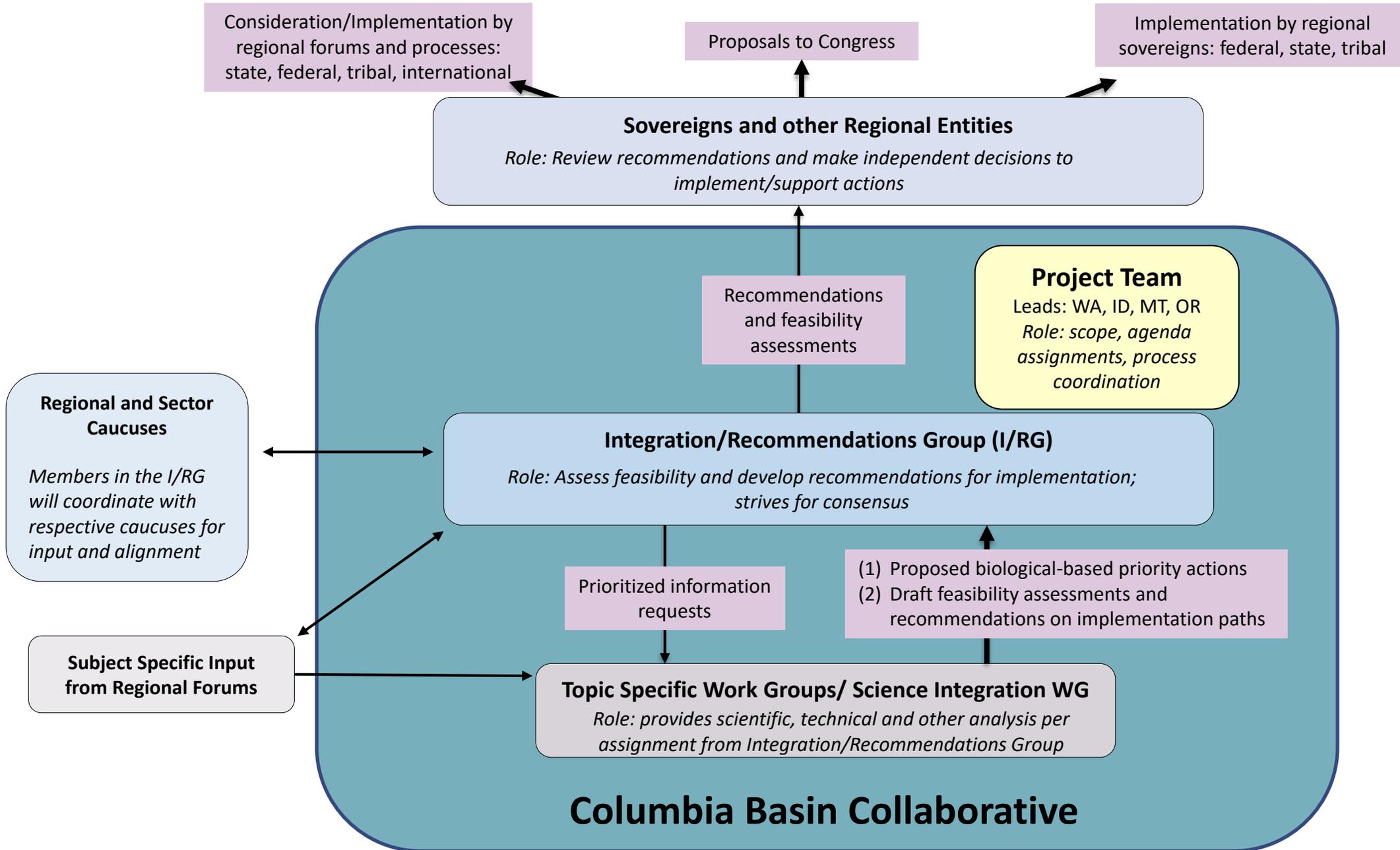
- Honor the agenda
- Listen to understand and ask questions to clarify
- Balance speaking time
- Don't pile on
- Be hard on the problems, soft on the people
- Seek alignment and common ground wherever possible
- Be present



# Updates From Around the Region

# **Consensus Process and Recommendation Overview**

# A regional approach to achieving the Columbia Basin Partnership goals



# Process for Consensus

*Consensus is reached when it becomes evident through deliberation that every Member, at the very least, does not oppose a decision.*

CBC Charter



# Process for Consensus

## **If the I/RG comes to consensus on a recommendation:**

- The recommendations will be shared to the appropriate decision-makers/actors.

## **If the I/RG is not able to reach consensus:**

- The I/RG can send a recommendation back to the work groups for revisions if needed.
- The discussion, including the arguments supporting and opposing the action will be documented and publicly available, reflecting the diverse interests represented among CBC members.
- Individual members of the CBC may continue to exercise their authority to partner together to advance recommendations.
- If the process is not advancing the CBPTF goals, it will be re-evaluated.

# Collaborate

Collaborate = Co-Labor

Labor (v): to exert one's powers of body or mind, especially with painful or strenuous effort



# Recommendation Overview

# Recommendation Overview

## Predation

1. Management of Double-crested Cormorants (DCCO) in the Columbia River Estuary
2. Enhancements and Modifications to the Existing Marine Mammal Protection Act Section 120 Pinniped Removal Program
3. Piscine predator monitoring and evaluation program
4. Columbia River Northern Pike and invasive nonnative fishes monitoring project

# Recommendation Overview

## Blocked Areas/ Hydropower

1. Fully fund the Upper Columbia United Tribes' Phase 2 Implementation Plan.
2. Improve monitoring and data collection for natural origin run timing
2. Meet with stakeholders to understand what people would like to see with salmon.

# Recommendation Overview

## Habitat

1. Implement the NOAA 5-Year Review recommended actions

# Recommendation Overview

## Science Integration Work Group

1. Study carrying capacity of the Columbia River
2. Develop structured decision-making framework



# Stretch break

See you at 2:40pm PT



# Review Recommendations

# Recommendation – Hydropower/Blocked Areas Work Group

- **Blocked Areas:** Fully Fund the Phase 2 Implementation Plan (P2IP)
  - Policy recommendations to improve efficiency:
    - Hatchery development
    - Donor stock access
    - Authorizations
    - Regulatory



Photo credit: Bureau of Land Management

# Funding to implement the P2IP

- The P2IP evaluates feasibility and strategies for fish passage and reintroduction in the Upper Columbia blocked area.
- The P2IP outlines a 21 year plan for implementation, and benefits to fish can be expected 1-6 years from completion. \$300 million is the estimated cost.
- This recommendation would benefit several upper Columbia stocks and return culturally important salmon to Upper Columbia Tribes.
- Implementation would be done by UCUT, federal, state, and tribal partners, and subcontractors.
- The P2IP needs to navigate several regulatory processes. There are outstanding questions of fish passage and reintroduction will relate to existing commitments.
- In the P2IP that there are no requests for changes to existing operations.

# Next Steps and Summary

# Questions?



Photo credit: Roger Tabor

# **Columbia Basin Collaborative Integration/Recommendations Group**

**April 20th, 2023  
9am-4pm PT/10am-5pm MT**

# **Welcome, Opening Remarks, and Agenda**

# Agenda Review

Time (PT)	Topic
9:00 – 9:20am	Welcome, Opening Remarks, and Agenda
9:20 – 10:45am	Review Recommendations – Predation & Hydropower
10:45 – 11:45am	Review Recommendation - Habitat
11:45am – 12:30pm	<i>Lunch break</i>
12:45 – 1:50pm	Other Work Group Updates
1:50 – 2:00pm	<i>Break</i>
2:00 – 3:00pm	Proposed Revisions to CBC Process
3:00 – 3:30pm	Check in on SCEE and Public Forum concept
3:30– 4:00pm	Confirm Upcoming Topics, Next Steps, and Summary
4:00 pm	<i>Adjourn</i>

# Meeting Guidelines

- Honor the agenda
- Listen to understand and ask questions to clarify
- Balance speaking time
- Don't pile on
- Be hard on the problems, soft on the people
- Seek alignment and common ground wherever possible
- Be present



# Review Recommendations

# Recommendations – Predation Work Group

- **Pinniped:** Enhancements and Modifications to the Existing Marine Mammal Protection Act Section 120 Pinniped Removal Program



# Enhance and Modify the Existing Marine Mammal Protection Act Section 120 Pinniped Removal Program

- Steller sea lions (SSL) and California sea lions (CSL) residing at Bonneville Dam and Willamette Falls consume salmon up to 6% mortality rate.
- The ODFW, WDFW, IDFG, and CRITFC jointly manage and implement lethal removal of SSLs and CSLs under the Marine Mammal Protection Act Section 120 Pinniped Removal Program.
- Extend authorization and fully fund the status-quo 120(f) permit scope
- Provide one-time funding for new sea lion removal equipment and to replace outdated equipment.
- Provide additional funding to increase the capacity to remove sea lions and process animals, including a program to maintain an on-call veterinarian roster and a training program for biologists and technicians for seasonal work.
- Extend and fully fund pinniped abundance estimation and kill rate monitoring programs, e.g., USACE Bonneville monitoring.
- Pursue research and development into lethal tributary removals and the use of darts.

# Recommendations – Predation Work Group

- **Avian:** Management of Double-crested Cormorants in the Columbia River Estuary



# Manage Double-crested Cormorants (DCCO) in the Columbia River Estuary

- Abundance of double-crested cormorants nesting upriver of East Sand Island has grown dramatically in recent years, causing concern for the recovery of salmonid runs.
- Use non-lethal techniques to reduce double-crested cormorant abundance on the Astoria-Megler Bridge colony and other colonies upriver of East Sand Island.
- Apply dissuasion and social attraction techniques to “push” cormorants from where we don’t want them and “pull” them to where we do.
- Adaptive management is crucial.
- Monitor and evaluate cormorant dispersal and outcomes for salmonids.
- Important to coordinate effort with ODOT and regional players.

# Recommendations – Predation Work Group

- **Piscine:** Develop and fund a robust Columbia River Northern Pike and invasive non-native fishes monitoring project.



# Develop and fund a robust Columbia River Northern Pike and invasive nonnative fishes monitoring project

- Invasive non-native fishes compromise salmonid species in the Columbia River watershed through predation, competition for food, interbreeding, disease transmission, food web disruption, and physical habitat alteration.
- Determine which water bodies are contributing to the increased abundance of Northern Pike or other invasive non-native fishes in the Columbia Basin.
- Implement wide scale eDNA monitoring in key lakes, reservoirs, tributaries, tributary mouths and the mainstem Columbia River for the presence of Northern Pike and other key invasive non-native fishes.
- Explore and implement actions to reduce or stop Northern Pike or other invasive non-native fishes from immigrating into anadromous waterbodies, including suppression methods and public outreach.
- Develop Northern Pike Rapid Response plans for each “section” of the Columbia River.
- Continue to fund Northern Pike Suppression projects in the upper Columbia River watershed beyond 2025 (the current end of most funding plans).

# Recommendations – Predation Work Group

- **Piscine:** Develop and initiate testing of a comprehensive piscine predator monitoring and evaluation program



# Develop and initiate testing of a comprehensive piscine predator monitoring and evaluation program

- There is no coordinated, large-scale program to investigate and quantify the overall predatory impact of piscine predators (e.g., Northern Pikeminnow, Smallmouth Bass, Walleye) to juvenile salmonid stocks.
- Without this, recommending meaningful piscine predation management actions and subsequently monitoring for the effects of those management actions will be difficult.
- Design a modular PPMEP study to generate unbiased estimates of predator abundance and the consumption rates of juvenile salmonids.
  - Use assessments in the following areas to inform the PPMEP design: **gear effectiveness**, develop **GIS models of habitat**, evaluate **diet analyses**, information on **non-native predators**
- A PPMEP study design could then be implemented, through **future action items**, to generate metrics to inform adaptive management of the lower and mid-Columbia River Basin.



# Lunch break

See you at 12:45pm PT



# Recommendation – Habitat Work Group

- **Implement NOAA 5-Year Review:** Support, implement, and enhance the recommendations from the NOAA 5-year reviews. Fully fund and implement specific habitat related actions.



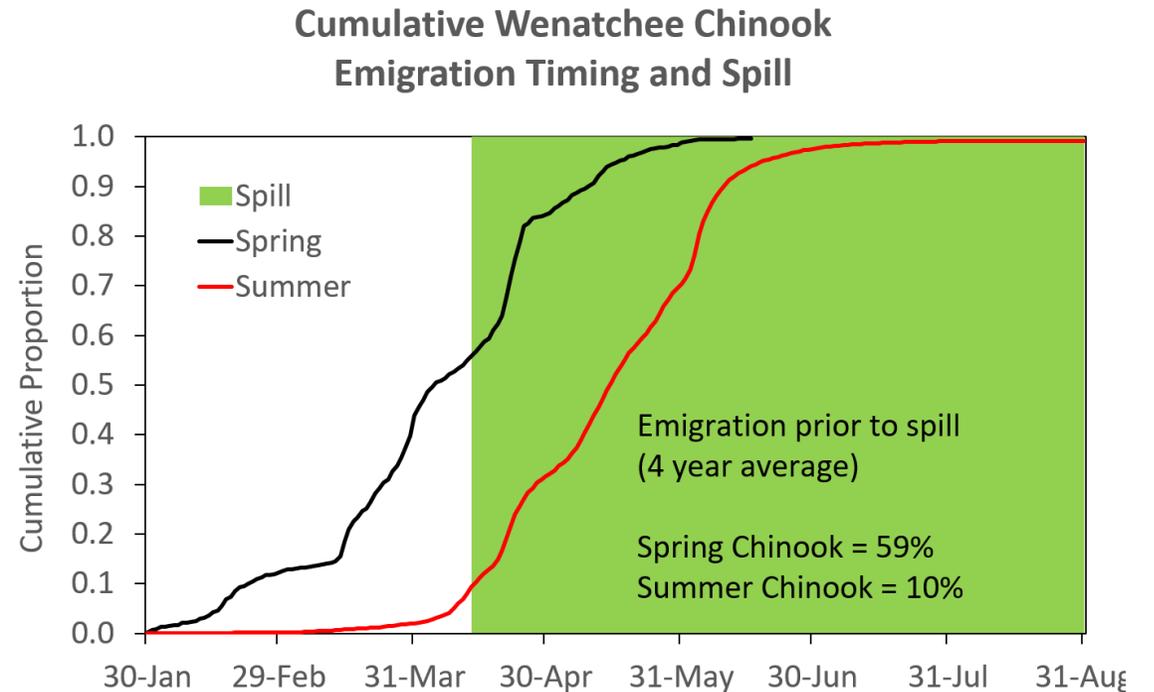
Photo credit: Northwest Power and Conservation Council

## **Support, implement, and enhance the recommendations from the NOAA 5-year reviews. Fully fund and implement specific habitat related actions.**

- The 5-year reviews contain a mix of specific and general habitat actions. More restoration would be needed to achieve the CBP mid-range goals.
- General recommendations:
  - Implement habitat actions consistent with best practices for watershed restoration.
  - Enhance frameworks that guide and prioritize restoration action.
  - Prioritize restoration actions that improve resiliency to climate change
  - Implement restoration at a scale sufficient to produce measurable changes in fish abundance
  - Improve floodplain management practices and restore floodplains.
  - Consider process-based methods to facilitate widespread floodplain restoration across larger areas.
- Develop a set of specific habitat priority actions for non-listed species.

# Recommendations – Hydropower/Blocked Areas Work Group

- **Hydropower:** Assess natural origin run timing
  - To improve our understanding of the behavior and survival of early migrating juveniles in the mainstem river
  - To inform spill and bypass operations



Murdoch A. 2017. Upper Columbia spring and summer Chinook salmon: differences that may explain recent trends in abundance. Presentation to the ISAB, September 15, 2017

# Assess Natural Origin Run Timing

- Assess run timing and entry timing of natural origin juvenile salmon and steelhead from natal tributaries into the Columbia River
- Availability of run timing data varies across the basin.
- Information could be used in adaptive management of spill and/or bypass operations to ensure safe passage routes for early migrants
- Benefits to improved data include potentially improving passage timing for wild and hatchery origin fish across the basin.
- State and tribal agencies, dam operators, and fishery co-managers are needed to implement the action
- Costs and regulatory processes vary depending on the data collection methods, data gaps, and site.
- Collected data could have implications for system-wide water management, power production, predator management, fisheries management, and other sectors, which could be an opportunity or challenge



# Stretch break

See you at 2:00pm PT



# Updates from the Work Groups

# Updates

- Hatcheries/Harvest Work Group updates
- SIWG concepts
- Hydropower concept

# Hatcheries/Harvest Work Group Updates

- Hatcheries/Harvest Work Group met six times
- Robust discussion on hatchery maintenance and accountability.
- Discussion on harvest goals relating to CBP goals.

# Study Carrying Capacity of the Columbia

## Phase 1

1. Establish carrying capacity and potential bottlenecks for juvenile salmon and steelhead within estuary and tributary habitats.
2. Conduct targeted studies to examine density dependent growth in areas identified as potential bottlenecks during the exercise above.
3. Establish carrying capacity and potential bottlenecks at the redd/fry stages beginning with the stocks listed above.
4. Conduct targeted studies to confirm density dependence at the redd/fry stages in areas identified as potential bottlenecks during the exercise above.

## Phase 2

1. For habitats where carrying capacity has been exceeded, conduct hatchery release time studies for maximizing growth and survival of both hatchery and wild salmonids.
2. Conduct studies to investigate how hatchery produced fish impact wild fish growth and survival through methods other than competition for nutrients and displacement from refugia.
3. Use life cycle modelling to evaluate how all of the above acting in concert impacts SARs.

# Develop a SDM Framework

1. Develop a structured decision-making (SDM) framework for the CBC and its work groups to use to make integrated, multi-factor salmon recovery planning a reality.
2. Share the framework, tools and associated restoration recommendations with management, funding, and regulatory agencies to foster integrated, multi-factor actions. This would enhance managers' abilities to develop and implement integrated, multi-factor strategies and actions needed to recover salmon and steelhead.

# Hydropower Stakeholder Outreach Concept

- Outreach to various stakeholders across sectors to understand people's interests and educate the public about the salmon recovery recommendations
- The Hydropower Work Group doesn't feel they have the outreach specific knowledge to further develop this recommendation
- Outreach would be different from the BiOp and other directed outreach, and would build on the CBPTF
- Stakeholder outreach should occur for all CBC recommendations, but particularly for hydropower operations
- A strategy should be developed by professionals with outreach expertise and needs more details.
- The outreach effort should be done with a holistic view of salmon and should be able to clarify how hydropower with other impacts are affecting salmon.

# Discussion

- What feedback do you have on this proposal?
- What next should the I/RG take on this concept?



Photo credit: Oregon Department of Fish and Wildlife

# **Confirm Upcoming Topics, Next Steps, and Summary**

# Suggested Future Topics

- Ocean conditions updates (available in the summer)
- Upper Columbia Summer and Spring Chinook 2023 runs
- Future conditions as a limiting factor



Photo Credit: Oregon Department of Fish and Wildlife

# Next Steps

- **KW:** Incorporate the revisions to the Predation – Pinniped, Predation – Cormorant, Predation – Northern Pike, Predation – Piscine Predator management, and Blocked Area - P2IP recommendations
- **KW:** Circulate the revised recommendations, draft introductory language, and the Natural Origin Run Timing consensus recommendation to the full for final review I/RG.
- **KW:** Coordinate with the Federal Representatives on language to clarify the Federal agencies' positions on recommendations
- **Habitat Work Group:** Work with Trout Unlimited staff on the NOAA 5-year review recommendation and Kevin Scribner re: landowner outreach components of the recommendation.
- **KW:** Schedule a special session to hear updates on the SCEE and public forum concepts
- **KW:** Develop survey for I/RG feedback on the SIWG concepts

# Questions?

# Thank You!